T. VaRSON   #/ 2

1635

RAW SEQUENCE LISTING   DATE: 05/10/2000
PATENT APPLICATION: US/09/214,371B   TIME: 10:19:43

Input Set : A:\4-20937.APP.txt
Output Set: N:\CRF3\05092000\I214371B.raw

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```
     5 <110> APPLICANT: Lane, David
     7         Bottger, Volker
     9         Bottger, Angelica
    11         Picksley, Stephen
    13         Chene, Patrick
    15         Hochkeppel, Heinz-Kurt
    17         Garcia-Echeverria, Carlos
    19         Furet, Pascal
    23 <120> TITLE OF INVENTION: Inhibitors of the Interaction of P53 and MDM2
    27 <130> FILE REFERENCE: 4-20937/A/PCT
C--> 31 <140> CURRENT APPLICATION NUMBER: US/09/214,371B
C--> 33 <141> CURRENT FILING DATE: 1999-03-26
    37 <150> PRIOR APPLICATION NUMBER: PCT/EP97/03549
    39 <151> PRIOR FILING DATE: 1997-07-04
    43 <160> NUMBER OF SEQ ID NOS: 83
    47 <170> SOFTWARE: PatentIn Ver. 2.0
    51 <210> SEQ ID NO: 1
    53 <211> LENGTH: 19
    55 <212> TYPE: PRT
    57 <213> ORGANISM: Artificial Sequence
    61 <220> FEATURE:
    63 <223> OTHER INFORMATION: Description of Artificial Sequence:peptide
    67 <400> SEQUENCE: 1
    69 Pro Leu Ser Gln Gln Thr Phe Ser Asp Leu Trp Lys Leu Leu Pro Glu
    71 1               5                   10                  15
    75 Asn Asn Val
    83 <210> SEQ ID NO: 2
    85 <211> LENGTH: 5
    87 <212> TYPE: PRT
    89 <213> ORGANISM: Artificial Sequence
    93 <220> FEATURE:
    95 <223> OTHER INFORMATION: Description of Artificial Sequence:peptide
    99 <220> FEATURE:
   101 <223> OTHER INFORMATION: Where Xaa may be any amino acid
   105 <400> SEQUENCE: 2
   107 Phe Xaa Xaa Leu Trp
   109 1               5
   115 <210> SEQ ID NO: 3
   117 <211> LENGTH: 10
   119 <212> TYPE: PRT
   121 <213> ORGANISM: Artificial Sequence
   125 <220> FEATURE:
   127 <223> OTHER INFORMATION: Description of Artificial Sequence:peptide
   131 <220> FEATURE:
   133 <223> OTHER INFORMATION: Xaa represents any amino acid and proline,
   135        phenylalanine, aspartic acid, tyrosine ,
   137        tryptophan and leucine are L-amino acids
```

RAW SEQUENCE LISTING   DATE: 05/10/2000
PATENT APPLICATION: US/09/214,371B   TIME: 10:19:43

Input Set : A:\4-20937.APP.txt
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```
141 <220> FEATURE:
145 <400> SEQUENCE: 3
147 Pro Xaa Phe Xaa Asp Tyr Trp Xaa Xaa Leu
149    1             5                  10
155 <210> SEQ ID NO: 4
157 <211> LENGTH: 10
159 <212> TYPE: PRT
161 <213> ORGANISM: Artificial Sequence
165 <220> FEATURE:
167 <223> OTHER INFORMATION: Description of Artificial Sequence:peptide
171 <220> FEATURE:
173 <221> NAME/KEY: VARIANT
175 <222> LOCATION: (1)
177 <223> OTHER INFORMATION: x=proline, leucine, glutamic acid, cysteine or
179       glutamine
183 <220> FEATURE:
185 <221> NAME/KEY: VARIANT
187 <222> LOCATION: (5)
189 <223> OTHER INFORMATION: x = arginine, histidine, glutamic acid, cysteine,
191       serine or preferably aspartic acid.
195 <220> FEATURE:
197 <221> NAME/KEY: VARIANT
199 <222> LOCATION: (6)
201 <223> OTHER INFORMATION: x = histidine, phenylalanine, or preferably
203       tyrosine
207 <220> FEATURE:
209 <221> NAME/KEY: VARIANT
211 <222> LOCATION: (10)
213 <223> OTHER INFORMATION: x=phenylalanine, glutamine or preferably leucine
217 <220> FEATURE:
219 <223> OTHER INFORMATION: Xaa at position 2, 4, 8 and 9 is any amino acid
222 <400> SEQUENCE: 4
224 Xaa Xaa Phe Xaa Xaa Xaa Trp Xaa Xaa Xaa
226    1          5                  10
232 <210> SEQ ID NO: 5
234 <211> LENGTH: 10
236 <212> TYPE: PRT
238 <213> ORGANISM: Artificial Sequence
242 <220> FEATURE:
244 <223> OTHER INFORMATION: Description of Artificial Sequence:peptide
248 <220> FEATURE:
250 <221> NAME/KEY: VARIANT
252 <222> LOCATION: (1)
254 <223> OTHER INFORMATION: x = proline, leucine, glutamic acid, cysteine or
256       glutamine
260 <220> FEATURE:
262 <221> NAME/KEY: VARIANT
264 <222> LOCATION: (2)
266 <223> OTHER INFORMATION: x = arginine, asparagine, alanine, threonine or
```

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RAW SEQUENCE LISTING              DATE: 05/10/2000
PATENT APPLICATION:  US/09/214,371B     TIME: 10:19:43

Input Set : A:\4-20937.APP.txt
Output Set: N:\CRF3\05092000\I214371B.raw
```

```
268        valine
272 <220> FEATURE:
274 <221> NAME/KEY: VARIANT
276 <222> LOCATION: (4)
278 <223> OTHER INFORMATION: X = methionine, isoleucine, threonine, arginine,
280        alanine or serine
284 <220> FEATURE:
286 <221> NAME/KEY: VARIANT
288 <222> LOCATION: (5)
290 <223> OTHER INFORMATION: X= arginine, histidine, glutamic acid, cysteine,
292        serine or preferably aspartic acid.
296 <220> FEATURE:
298 <221> NAME/KEY: VARIANT
300 <222> LOCATION: (6)
302 <223> OTHER INFORMATION: X = histidine, phenylalanine or preferably
304        tyrosine
308 <220> FEATURE:
310 <221> NAME/KEY: VARIANT
312 <222> LOCATION: (8)
314 <223> OTHER INFORMATION: X = glutamic acid, threonine, alanine,
316        phenylalanine or serine
320 <220> FEATURE:
322 <221> NAME/KEY: VARIANT
324 <222> LOCATION: (9)
326 <223> OTHER INFORMATION: X= glycine, glutamine, threonine, alanine or
328        aspartic acid
332 <220> FEATURE:
334 <221> NAME/KEY: VARIANT
336 <222> LOCATION: (10)
338 <223> OTHER INFORMATION: Xaa = phenylalanine, glutamine or preferably
340        leucine
344 <400> SEQUENCE: 5
346 Xaa Xaa Phe Xaa Xaa Xaa Trp Xaa Xaa Xaa
348    1             5              10
354 <210> SEQ ID NO: 6
356 <211> LENGTH: 12
358 <212> TYPE: PRT
360 <213> ORGANISM: Artificial Sequence
364 <220> FEATURE:
366 <223> OTHER INFORMATION: Description of Artificial Sequence:peptide
370 <400> SEQUENCE: 6
372 Met Pro Arg Phe Met Asp Tyr Trp Glu Gly Leu Asn
374    1             5              10
380 <210> SEQ ID NO: 7
382 <211> LENGTH: 12
384 <212> TYPE: PRT
386 <213> ORGANISM: Artificial Sequence
390 <220> FEATURE:
392 <223> OTHER INFORMATION: Description of Artificial Sequence:peptide
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RAW SEQUENCE LISTING   DATE: 05/10/2000
PATENT APPLICATION: US/09/214,371B   TIME: 10:19:43

Input Set : A:\4-20937.APP.txt
Output Set: N:\CRF3\05092000\I214371B.raw

```
396 <400> SEQUENCE: 7
398 Gln Pro Thr Phe Ser Asp Tyr Trp Lys Leu Leu Pro
400   1           5              10
406 <210> SEQ ID NO: 8
408 <211> LENGTH: 15
410 <212> TYPE: PRT
412 <213> ORGANISM: Artificial Sequence
416 <220> FEATURE:
418 <223> OTHER INFORMATION: Description of Artificial Sequence:peptide
422 <400> SEQUENCE: 8
424 Pro Arg Pro Ala Leu Val Phe Ala Asp Tyr Trp Glu Thr Leu Tyr
426   1           5              10             15
432 <210> SEQ ID NO: 9
434 <211> LENGTH: 28
436 <212> TYPE: PRT
438 <213> ORGANISM: Artificial Sequence
442 <220> FEATURE:
444 <223> OTHER INFORMATION: Description of Artificial Sequence:peptide
448 <400> SEQUENCE: 9 :
450 Met Pro Arg Phe Met Asp Tyr Trp Glu Gly Leu Asn Arg Gln Ile Lys
452   1           5              .10            15
456 Ile Trp Phe Gln Asn Arg Arg Met Lys Trp Lys Lys
458         20             25
464 <210> SEQ ID NO: 10
466 <211> LENGTH: 8    .
468 <212> TYPE: PRT
470 <213> ORGANISM: Artificial Sequence
474 <220> FEATURE:
476 <223> OTHER INFORMATION: Description of Artificial Sequence:peptide
480 <220> FEATURE:
482 <221> NAME/KEY: VARIANT
484 <222> LOCATION: (2)
486 <223> OTHER INFORMATION: X = methionine, isoleucine, threonine, arginine,
488       alanine or serine, preferably methionine
492 <220> FEATURE:
494 <221> NAME/KEY: VARIANT
496 <222> LOCATION: (3)
498 <223> OTHER INFORMATION: X = arginine, histidine, glutamic acid, cysteine,
500       serine, or preferably aspartic acid.
504 <220> FEATURE:
506 <221> NAME/KEY: VARIANT
508 <222> LOCATION: (4)
510 <223> OTHER INFORMATION: X = histidine, phenylalanine, or preferably
512       tyrosine
516 <220> FEATURE:
518 <221> NAME/KEY: VARIANT
520 <222> LOCATION: (6)
522 <223> OTHER INFORMATION: X = glutamic acid, threonine, alanine,
524       phenylalanine or serine, preferably glutamic acid
```

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            RAW SEQUENCE LISTING                  DATE: 05/10/2000
            PATENT APPLICATION:  US/09/214,371B    TIME: 10:19:43

            Input Set : A:\4-20937.APP.txt
            Output Set: N:\CRF3\05092000\I214371B.raw
```

```
528 <220> FEATURE:
530 <221> NAME/KEY: VARIANT
532 <222> LOCATION: (7)
534 <223> OTHER INFORMATION: X = glycine, glutamine, threonine, alanine or
536        aspartic acid, preferably glycine.
540 <220> FEATURE:
542 <221> NAME/KEY: VARIANT
544 <222> LOCATION: (8)
546 <223> OTHER INFORMATION: X = phenylalanine, glutamine or preferably
548        leucine.
552 <400> SEQUENCE: 10
554 Phe Xaa Xaa Xaa Trp Xaa Xaa Xaa
556  1                   5
562 <210> SEQ ID NO: 11
564 <211> LENGTH: 9
566 <212> TYPE: PRT
568 <213> ORGANISM: Artificial Sequence
572 <220> FEATURE:
574 <223> OTHER INFORMATION: Description of Artificial Sequence:peptide
578 <220> FEATURE:
580 <221> NAME/KEY: VARIANT
582 <222> LOCATION: (1)
584 <223> OTHER INFORMATION: X = arginine, asparagine, alanine, threonine or
586        valine, particularly arginine.
590 <220> FEATURE:
592 <221> NAME/KEY: VARIANT
594 <222> LOCATION: (3)
596 <223> OTHER INFORMATION: X = methionine, isoleucine, threonine, arginine,
598        alanine or serine, preferably methionine
602 <220> FEATURE:
604 <221> NAME/KEY: VARIANT
606 <222> LOCATION: (4)
608 <223> OTHER INFORMATION: X = arginine, histidine, glutamic acid, cysteine,
610        serine or preferably aspartic acid.
614 <220> FEATURE:
616 <221> NAME/KEY: VARIANT
618 <222> LOCATION: (5)
620 <223> OTHER INFORMATION: Xaa = histidine, phenylalanine or preferably
622        tyrosine.
626 <220> FEATURE:
628 <221> NAME/KEY: VARIANT
630 <222> LOCATION: (7)
632 <223> OTHER INFORMATION: X = glutamic acid, threonine, alanine,
634        phenylalanine or serine, preferably glutamic acid.
638 <220> FEATURE:
640 <221> NAME/KEY: VARIANT
642 <222> LOCATION: (8)
644 <223> OTHER INFORMATION: X = glycine, glutamine, threonine, alanine or
646        aspartic acid preferably glycine.
```

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

VERIFICATION SUMMARY   DATE: 05/10/2000
PATENT APPLICATION: US/09/214,371B   TIME: 10:19:44

Input Set : A:\4-20937.APP.txt
Output Set: N:\CRF3\05092000\I214371B.raw

L:31 M:270 C: Current Application Number differs, Replaced Current Application Number
L:33 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:107 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:2
L:107 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:2
L:107 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:2
L:147 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:3
L:147 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:3
L:147 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:3
L:224 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:346 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:554 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10
L:664 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11
L:866 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18
L:912 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19
L:958 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20
L:1004 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21
L:1050 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22
L:1096 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23
L:1142 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24
L:1188 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25
L:1234 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26
L:1280 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27
L:1326 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28
L:1372 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29
L:1418 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30
L:1454 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31
L:1490 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:32
L:1536 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33
L:1582 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:34
L:1628 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35
L:1674 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:36
L:1720 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37
L:1766 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:38
L:1812 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:39
L:1858 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:40
L:1904 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:41
L:1950 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:42
L:1956 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:42
L:2048 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:44
L:2054 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:44
L:2126 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:46
L:2172 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:47
L:2218 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:48
L:2264 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:49
L:2310 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:50
L:2356 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:51
L:2402 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:52
L:2468 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:53

VERIFICATION SUMMARY   DATE: 05/10/2000
PATENT APPLICATION: US/09/214,371B   TIME: 10:19:44

Input Set : A:\4-20937.APP.txt
Output Set: N:\CRF3\05092000\I214371B.raw

```
L:2534 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:54
L:2600 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:55
L:2666 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:56
L:2742 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:57
L:2808 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:58
L:2854 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:59
L:2900 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:60
L:2956 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:61
L:3012 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:62
L:3284 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:73
```